Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-6. (Canceled)

7. (Currently amended) An apparatus for mechanical control of an automated immunochemistry or chemistry instrument which has a multiplicity of subsystems for performing immunochemistry or chemistry assays, the apparatus for mechanical control comprising:

a mechanical control system having both object-orient features and real-time features for control of the operations of the multiplicity of subsystems; wherein the subsystems operate on, transform, or transfer passengers; and

a passenger template base class comprising facilities configured for passenger creation, destruction, enumeration and state recovery.

8. (Original) The apparatus as defined in claim 7, wherein said mechanical control system comprises a sequencer for starting said operations of said multiplicity of subsystems at correct times respectively.

9. (Original) The apparatus as defined in claim 7, wherein said mechanical control system comprises a scheduler for determining the times when one or more sets of operations of said multiplicity of subsystems must be executed.

10. (Previously presented) The apparatus as defined in claim 7, wherein said mechanical control system comprises a recipe containing instructions for each assay.

11. (Previously presented) The apparatus as defined in claim 7, wherein said mechanical control system comprises a chronicle which stores test history information pertaining to each assay.

12. (Previously presented) The apparatus as defined in claim 7, wherein said object-orient features of said mechanical control system include the feature of hiding the real-time features in a subsystem base class.

13. (Original) The apparatus as defined in claim 7, wherein said object-orient features of said mechanical control system include the feature of causing actions to be performed on specific vessels at specific times.

14. (Previously presented) The apparatus as defined in claim 7, wherein said real-time features of said mechanical control system include the feature of satisfying the requirement that certain actions of one or more subsystems of said apparatus must occur at a specific time in order for said apparatus to function correctly.

15-26. (Canceled)